2003 ADVANCED TTL
Graduate Credit Syllabus

A. **INSTITUTION:** <to be entered>

B. **INSTRUCTOR NAME, ADDRESS, PHONE NUMBER, EMAIL ADDRESS:**
 <to be entered>

C. **SEMESTER/YEAR:** Summer 2003

D. **COURSE PREFIX, NUMBER AND TITLE:**
 (Summer 2001-DSU) TTL 580 - Advanced Technology for Teaching and Learning
Academy

E. **CREDIT HOURS:** 2 semester hours

F. **APPROVED COURSE DESCRIPTION:**
Advanced TTL will build upon the skills and abilities presented at the Basic Teacher
Academies. Advanced TTL will allow participants to extend their skill with familiar
applications, such as MS Office Suite XP (Word, Access, Excel, PowerPoint), advanced web
design, digital photography and editing, and will also introduce new technology tools and
procedures. New tools and procedures will include video editing, use of PDA (Personal
Digital Assistant), and an introduction to the use of GPS (Global Positioning Satellite
receivers). Participants will apply these applications and tools to classroom curriculum and/or
professional development activities.

G. **ADDITIONAL COURSE DESCRIPTION:**
Advanced TTL has been developed as the direct result of the interest and requests of Basic
TTL academy graduates and others interested in having an opportunity to extend their
technical skills and capabilities. Advanced TTL is a two-week residential academy focusing
on advanced technologies and skill extension with familiar applications.

H. **PREREQUISITES:** South Dakota Teaching Certificate

I. **ADDITIONAL COURSE INFORMATION:**
If there is any student in this class who, due to a disability, has need for non-standard note
taking, test taking, or other course modification, please contact <insert contact information>
as soon as possible.

J. **TEXTBOOK AND OTHER REFERENCES:**
(2002). Adobe Photoshop Classroom in a Book electronic tutorial
http://www.adobe.com/education/cibs/cib_photoshop.html
Harreld, K. (2000). *iMovie fast & easy* . Prima Publishing.
Kozakis, K., & Savage, S. (2002). *FrontPage 2002, Instructor-Led Courseware, Module I, II*.
Phoenix: Computer Prep.
Kozakis, K. & Savage, S. (2002). *Office XP, Instructor-Led Courseware, Access, Excel,*

PowerPoint, Word, Module I, II. Phoenix: Computer Prep.
Pogue, J. & Hawkins, J. (1998). PalmPilot: The ultimate guide. O'Reilley and Associates.

K. **COMPUTER SKILLS USED:**
   Advanced TTL Participants are expected to possess the following skill levels:
   Prerequisite Participant Skills: Must have attended (teacher or participant) or provide evidence of technical, instructional, and curriculum skills that are consistent with those of TTL Academy graduates They should also have a strong interest in and technology skills sufficient to address the advanced subjects that will be covered during this Academy. Participants are expected to be self-directed, collaborative learners.

L. **CORE OBJECTIVES:**
   During the Advanced TTL Academy, participants will enhance existing skills to approach the following Milken Professional Competencies:

   - The educator is a sophisticated user of computer applications. The primary means of skill development shifts from workshop or training sessions to the use of manuals and "just in time" training resources. The time spent learning new applications decreases as the educator learns to cross-apply skills learned in previous applications. At this stage that educator can act as a resource to others in the use of applications and teaches colleagues informal and formal settings.

   - The educator uses technology throughout the curriculum, often in unique and creative ways. The educator actively seeks out new technology solutions when there is evidence that these technologies are likely to improve student learning. Instructional strategies are often altered significantly as a result of the technologies. The educator at this stage often introduces other staff to the new technologies.

   - The Use of computers and peripheral devices has become transparent. The educator stays abreast of new technologies related to her or his field and plays an active role in purchase decisions. The ability to transfer her or his skills from current tools to new tools allows the educator to learn more quickly and independently.

   - The use of information tools is central to the educator's professional life. The educator conducts research and guides others in researching and evaluating online information to support the curriculum.

   - The educator uses a variety of multimedia tools and learns new tools easily by generalizing skills between applications. She/he is familiar with multimedia file formats and is able to move content seamlessly between applications. The educator guides students in applying multimedia technologies to products of value to audiences outside the classroom.

   - The educator uses productivity and communications tools to enhance professional practice. A range of collaborative technologies allows for higher levels of professional discourse and access to expertise. The educator at this level serves as a resource, assisting others in acquiring technology skills in both formal and informal settings.
     Adapted from: Milken Exchange on Education Technology Professional Competency Continuum. Professional Skills for the Digital Age Classroom. Dimension 3.
     http://www.milkenexchange.org/

ADDITIONAL OBJECTIVES:
Advanced TTL Strand General Objectives

Strand	Performance Objectives	Products
Web Page Development: FrontPage 2002	Participants will engage in activities in order to − Enhance web development and design skills; − Select and apply FrontPage tools Plan/Design/Update a website that supports classroom instruction.	Participants will: − Complete all class activities; − Demonstrate acceptable progress on the design of a website that supports classroom instruction.
Personal Digital Assistant (PDA) & Global Positioning System receiver (GPS)	Participants will engage in activities in order to − Develop an understanding of professional productivity features of the PDA − Explore the curriculum integration uses of PDA peripherals. − Develop an understanding of features of the GPS. − Explore the curriculum integration uses of GPS/GIS	Participants will: − Complete all class activities; − Draft/discuss classroom activities that integrate PDA and appropriate peripherals. − Draft/discuss classroom activities that integrate GPS/GIS.
Office XP (2002) (Word, Excel, Access, PowerPoint)	Participants will engage in activities in order to − Enhance professional productivity through advanced integrative features of MS Office Suite components. − Explore curriculum integration possibilities of MS Office Suite components.	Participants will: − Complete all class activities; − Draft/discuss classroom activities that integrate Office XP Suite components.
Digital Photography & Editing	Participants will engage in activities in order to − Develop proficiency with digital photography and appropriate editing software applications. − Explore curriculum integration possibilities that use digital photography.	Participants will: − Complete all class activities; − Draft/discuss classroom activities that integrate digital photography and related software applications.
Digital Video Production and Editing	Participants will engage in activities in order to − Develop proficiency in creating, editing, and exporting digital video to support classroom instruction.	Participants will: − Complete all class activities; − Draft/discuss classroom activities that integrate digital video.
K-12 Classroom or Staff Development Lesson Design	Participant will engage in activities in order to − Design instruction that reflects best practice and integrates strand technologies.	Participant will: − Complete at least one unit/lesson that meets the stated criteria and includes all components of the lesson design template.

N. **OUTLINE:**
Week 1 Strand Schedule

Week 1

	Monday	Tuesday	Wednesday	Thursday	Friday
Group 1	PDA	GPS	GPS	Video Editing	Video editing
Group 2	PDA	Video Editing	Video Editing	Adv Web Design	Adv Web Design
Group 3	PDA	Adv Web	Adv Web	Digital Photo	Digital Photo
Group 4	PDA	Digital Photo	Digital Photo	GPS	GPS

Week 2

	Monday	Tuesday	Wednesday	Thursday	Friday
Group 1	Adv Web Design	Adv Web Design	Digital Photo	Digital Photo	Adv Office
Group 2	Digital Photo	Digital Photo	GPS	GPS	Adv Office
Group 3	GPS	GPS	Video Edit	Video Edit	Adv Office
Group 4	Video Edit	Video Edit	Adv Web	Adv Web	Adv Office

Daily Schedule:

Day 1 of the Advanced TTL each session will begin with an all group meeting from 8:00 – 8:30. Administrative and welcome issues will be addressed at this time.

Closing Day of the Advanced TTL will end with an all-group meeting from 4:30 – 5:00 for the purpose of closing messages and administrative issues.

Daily rotation schedule (other than beginning and closing day):

Breakfast:	7:00 – 8:00 am
Classroom Instruction/Exploration:	8:00 – 12:00 am
Lunch:	12:00 – 1:00 pm
Classroom Instruction/Exploration:	1:00 – 3:00 pm
Individual/Group Development Time:	3:00 – 5:00 pm
Supper:	5:30 – 6:30 pm
Optional Curriculum Interest Sessions, Independent/Group Development and Practice:	6:30 – 10:00 pm

EVALUATION PROCEDURES:

Participant Product Requirements: (See rubrics)
- Participation (5 %)
- Strand Products (50%)
- Focus Product (45%)

Grading:
90-100 points = A
80-89 points = B
70-79 points = C
60-69 points = D
Less than 60 = failing/incomplete

O. **SELECTED BIBLIOGRAPHY/RESEARCH AND BEST PRACTICES:**

Advanced Office:
Habraken, Joe. Microsoft Office 2000. Que Corporation. May 1999.
Microsoft Corporation. Microsoft Office 2000 Resource Kit . Microsoft Press. May 1999.

DVD:
Doucette, M. (1999). *Digital videos for dummies* . IDG Books Worldwide.
Miser, B. (2001). *The complete idiot's guide to iMovie 2* . Que Corp.
Smith, S. (2000). *Making iMovies.* Peachspring Press.
Taylor, J. (1998) *DVD demystified.* McGraw-Hill Companies.

Digital Photoshop:
Gooking, D. (2000). *Digital scanning & photography.* Microsoft Press.
Greenburg, S. (1999) *The complete idiot's guide to digital photography.* Que Corp.
King, J. (2000). *Digital photography for dummies.* Hungry Minds, Inc.
Lee, L. (2000) *Photoshop 6 digital darkroom.* Prima Publishing.
Sadun, E. (2000). *Digital photography! I didn't know I could do that.* Sybex.

Palm Pilots:
Collins, C. (1999). *The little palm book.* Peachpit Press.
Johnson, D. (2000). *How to do everything with your palm.* McGraw Hill.
Salkind, N. (1999) *PalmPilot and Palm Organizers – I didn't know you could do that!* Sybex.

Web Design:
Nielsen, J. (1999). *Designing Web Usability : The Practice of Simplicity.* New Riders Publishing.
Castro, E. (2000). *HTML 4 for the World Wide Web Visual Quickstart Guide.* Peachpit Press.
Veen, J. (2000). *The Art and Science of Web Design.* Que.

P. **FIELD/CLINICAL EXPERIENCES:**

Q. **RELATION TO MISSION:** <enter as appropriate for individual university>

R. **GRADUATE NATURE:** Participants will research, discuss, and apply current pedagogy on effective teaching and learning processes using technology. Participants are provided the theoretical and technical background, which enable them to be knowledgeable about computers and related technologies. Using the concepts and skills presented in the course, participants will design instructional lessons/units. (Refer to lesson design template.)

Assessment Rubric for 2002 Advanced TTL Graduate Credit

Participation (5 maximum grading points) *(The participant will be awarded one point for each attribute met.)*			
Exemplary 5-4 points Developing 3-2 points Emerging 1 point	– She/He contributes to a collegial working environment that promotes discussion, inquiry, and the exchange of ideas and research; – She/He engages in professional collaboration that enhances professional growth, both personally and collegially; – She/He is a self-directed learner who pursues and utilizes various credible electronic and traditional resources to extend personal competencies; – She/He explores new technologies and recommends innovative solutions and applications; – She/He complies with copyright law as it applies to research, product development and use of resources.		

Software/Hardware Applications/Devices (50 maximum grading points			
▪ **Office Suite Applications** (10 points possible) ▪ **Web Page Development** (10 points possible) ▪ **Digital Photography and Editing** (10 points possible) ▪ **Personal Digital Assistant (PDA) and Global Positioning System (GPS) receivers** (10 points possible) ▪ **Digital Video Production and Editing** (10 points possible)			
Exemplary 10-8 points Developing 7-4 points Emerging 3-1 points (Refer to Strand Objectives)	**10 - 8 points within the strand** -Displays in-depth understanding of application components in such a way as to produce exceptional products.	**7 -4 points within the strand** -Displays a functional understanding of application components in such a way as to produce appropriate products.	**3 -1 points within the strand** -Displays minimal understanding of application components and produces appropriate products with great difficulty.

Focus Product - Instructional Design (45 maximum grading points)			
Exemplary 10-8 points Developing 7-4 points Emerging 3-1 points (Refer to Lesson/Unit Template)	Focus product displays in-depth understanding of instructional design and components reflect research-based best practice. Technology integration enhances and extends learning. The focus product includes all template components.	Focus product displays a functional understanding of instructional design and research-based best practice. Technology integration adds value to proposed activities.	Focus product displays minimal understanding of instructional design. Components reflect only traditional practice. Technology integration primarily automates existing activities.

Grading:
90-100 points = A
80-89 points = B
70-79 points = C
60-69 points = D
Less than 60 = failing/incomplete

Focus Product Components
Unit/Lesson Design Components

Lessons that are completed for 2002 Advanced TTL graduate credit must include:

1. **LESSON OVERVIEW**
   - Lesson Title
   - Grade Level(s):
   - Name(s) of lesson designer(s)
   - Duration of lesson
   - School District/School
   - Discipline/Subject/Topic Areas

2. **STANDARDS**
   - K-12 Lessons must include the appropriate SD Content Standards that will be addressed in the lesson
     - State the content area, complete goal, indicator, and benchmark for each appropriate standard (not just the number reference)
   - Staff development lessons are to be referenced to either the National Staff Development Council Standards < http://nsdc.org/educatorindex.htm > and/or the National Technology Standards for Teachers http://cnets.iste.org/index3.html

3. **LESSON SUMMARY**
   - 2-3 paragraphs that provide colleagues with information about the goals of the lesson and the expected student learning.

4. **KEY KNOWLEDGE, SKILLS AND UNDERSTANDINGS**
   - A statement of the key knowledge, skills and understandings that the students will acquire as a result of the lesson
     - No more than one page in length
     - Lesson must address more than factual information transmission
     - Stated in terms of student learning and performance

5. **ASSESSMENT**
   - An outline of assessment methods and instruments that will be used to collect evidence of student progress and understanding
     - At least two different assessment methods must be outlined (teacher-made tests and prompts, performance tasks, student self-assessment, etc.)

6. **LEARNING ACTIVITY SUMMARIES**
   - A summary of each learning activity that will be included in the lesson. Each activity summary must include:
     - Activity goals/objectives (relate to stated Standards)
     - Assessment methods (may be the assessment plan and/or specific instruments)
     - Modifications for special needs learners (as appropriate)
     - Use(s) of technology – specific to those in Advanced Academy strands

7. **RESOURCE LIST & LINKS**
   - Electronic resources including hardware, software, and web links
   - Non-electronic materials/resources that are needed to replicate the activity

8. **DESIGNER NOTES**
   - Relevant Information not provided above (misconception alerts, prerequisite knowledge, etc.)

Advanced TTL Components
Strand Objective/Goal, Skills and Knowledge

Strand Goal/Objective	Skills and Knowledge Addressed During the Academy Strands Will Include, But Are Not Limited To:
Office XP Exploration and advancement of individual competency in the use of Microsoft Office XP components (Word, PowerPoint, FrontPage, Excel, Access) and development/discussion of related classroom/staff development activities	– Productivity and Efficiency Features – Access to Information Features – Reliability, Data Recovery, and Security Features – Collaborative Document Review (some of these are advanced Office features that are included in Office 97 and 2000, as well) – Collaborating with Others: Integration with SharePoint Team Services (this requires FrontPage version 2002 – full functionality may not be available for Adv. TTL) – Connecting and Coordinating with Others (full functionality of these features may not be available at all sites) – Classroom application of Office XP components Office XP online resources at http://office.microsoft.com/ and http://www.microsoft.com/education/
Web Design Advancement of individual competency in web design using MS FrontPage and development/discussion of related classroom/staff development activities;	– Enhance web development and design skills – Select and apply FrontPage tools – Plan/design/update a website that supports classroom instruction * Challenge – re-design website so that it is Bobby compliant. *Bobby WorldWide at http://www.cast.org/bobby/ is a tool for Web page authors. It helps them identify changes to their pages so users with disabilities can more easily use their Web pages.*
Digital Video Advancement of individual competency in the production of digital video production and development/discussion of related classroom/staff development activities;	– Shoot video using camcorders – Capture/Import video, audio – Edit content (crop video shots and audio clips, create transitions, create special effects, create titles) – Create still shots – Export movies in various formats (dependent on capabilities) – Language of video production – Burn CD of final movie – (total length <5 min. - dependent on capabilities) – Classroom application of video photography

Strand Goal/Objective	Skills and Knowledge Addressed During the Academy Strands Will Include, But Are Not Limited To:
PDA Advancement of individual competency in the use of PDA (Personal Digital Assistant organizational devices) and development/discussion of related classroom/staff development activities	– Add, edit, and beam contact information using the Address Book – Add, edit, beam and customize a digital agenda using the To Do List – Write and beam notes using the Note Pad – Store and beam simple text documents using Memo Pad – Create and store a digital schedule using Date Book – Download and use software from the Internet – Back up information between the handheld and desktop computer system using the Hot Sync – Explore and use (as available) other handheld features and peripherals – Classroom application of handheld computer devices
GPS/GIS Advancement of individual competency in the use of Global Positioning System devices and development/discussion of related classroom/staff development activities	– Introduction to GPS and GPS receiver units: history, availability, applications & examples – Use of GPS features, such as downloading waypoints, tracking routes through tracks – Overview of GIS as related to GPS – Hands-on use of GPS receiver units through orienteering/scavenger hunt activities – Classroom application of GPS/GIS
Digital Photography Advancement of individual competency in the use of digital photography and development/discussion of related classroom/staff development activities	– Use of digital camera features – Use of specific software to refine digital pictures – Classroom application of digital photography and related software Photoshop online resource: – http://www.adobe.com/education/cibs/cib_photoshop.html